



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,003	04/12/2004	Masahiko Sugimoto	F02-167191C/FK	1589
21254 7590 07/11/2007 MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER SMITH, JEFFREY S	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 07/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/822,003	Applicant(s) SUGIMOTO, MASAHIKO	
	Examiner Jeffrey S. Smith	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,7,8,12,13 and 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,9-11 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of species I in the reply filed on June 4, 2007 is acknowledged. Applicant has characterized species I as including claims 1-3, 6-11 and 14. However, claims 7 and 8 are not included in species I but rather in species VI. Claim 7 recites data prepared by converting an amount of characteristic and claim 8 recites a rule for extracting the amount, which are forms of artificial intelligence as discussed in the section of the application labeled "Fifth Embodiment," including paragraphs 106-107 and 112, and as shown in figure 13, which is the figure of species VI. Claims 4-5, 7-8, 12-13 and 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Claims 1-3, 6, 9-11 and 14 are examined on the merits.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies of Japanese Application Numbers 2003-109177 filed on April 14, 2003, 2003-109178 filed on April 14, 2003, and 2004-076073 filed on March 17, 2004 have been received.

***Requirement for Information***

The response to the requirement for information in the previous response was incomplete. In addition to asking whether a search was performed, the requirement asked whether any rejections were made in any corresponding foreign applications. In order to assist applicant in responding to the requirement, it is restated here as a series of questions, most of which can be answered with yes or no.

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please provide answers to each of the following interrogatories eliciting factual information that is known by the applicant and the assignee of this application:

1. Did the Japanese Patent Office make any rejections to Japan 2003-109177 filed on April 14, 2003?

Please respond by answering "yes" if the Japanese Patent Office did make any rejections or by answering "no" if the Japanese Patent Office did not make any rejections.

If the Japanese Patent Office did make any rejections, please submit a copy of each rejection.

2. Did the Japanese Patent Office make any rejections to Japan 2003-109178 filed on April 14, 2003? If the Japanese Patent Office did make any rejections, please submit a copy of each rejection.

Art Unit: 2624

3. Did the Japanese Patent Office make any rejections to Japan 2004-076073 filed on March 17, 2004? If the Japanese Patent Office did make any rejections, please submit a copy of each rejection.

4. Did the applicant or the assignee of this application file any applications in any country that claim foreign priority to application number Japan 2003-109177 filed on April 14, 2003? If any such applications have been filed and have received any rejections, please submit copies of each rejection.

5. Did the applicant or the assignee of this application file any applications in any country that claim foreign priority to application number Japan 2003-109178 filed on April 14, 2003? If any such applications have been filed and have received any rejections, please submit copies of each rejection.

6. Did the applicant or the assignee of this application file any applications in any country that claim foreign priority to application number Japan 2004-076073 filed on March 17, 2004? If any such applications have been filed and have received any rejections, please submit copies of each rejection.

7. Please indicate the current status of each application that is or claims priority to application number Japan 2003-109177 filed on April 14, 2003.

8. Please indicate the current status of each application that is or claims priority to application number Japan 2003-109178 filed on April 14, 2003.

9. Please indicate the current status of each application that is or claims priority to application number Japan 2004-076073 filed on March 17, 2004.

10. The specification on pages 1-2 says that Japan 2001-215403 "describes only a technique for achieving focus and fails to provide descriptions about the method of extracting the face portion of the subject, which method enables high-speed extraction of a face image." Yet, the prior art section of this reference cites other references that seem to do exactly this. Therefore, please disclose each reference cited in Japan 2001-215403 so that the Examiner can confirm that the description of the prior art on pages 1-2 of the application is accurate. (See MPEP section 2004 paragraph 7 "Care should be taken to see that prior art or other information cited in a specification or in an information disclosure statement is properly described and that the information is not incorrectly or incompletely characterized.... During prosecution patentee submitted an untranslated 29-page Japanese reference as well as a concise explanation of its relevance and an existing one-page partial English translation, both of which were directed to less material portions of the reference. The untranslated portions 'contained a more complete combination of the elements claimed [in the patent] than anything else before the PTO.' ... The patentee, whose native language was Japanese, was held to understand the materiality of the reference.")

This information is relevant to patentability. Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because figure 1 shows only empty boxes that do not include a description of each box. For example, box 1 should be labeled as solid-state imaging element, and box 4 should contain the words analog signal processing section. All of the other empty elements need to contain labels. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the term from claim 3 "the comparison is performed through use of a resized image into which the image to be processed has been resized" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be

Art Unit: 2624

removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an



Art Unit: 2624

improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it contains legal words such as comprising and is one long run-on sentence that is a copy of claim 1. Correction is required. See MPEP § 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities. Throughout the specification, the term alpha and the term a are used. The term a should be replaced with alpha to be consistent with the rest of the specification and the drawings.

Also, in paragraph 73, the purpose of the ellipsis is unclear.

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the term from claim 3 "the comparison is performed through use of a resized image into which the image to be processed has been resized" is not found in the detailed description.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 10 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claim 3, the term "the comparison is performed through use of a resized image into which the image to be processed has been resized" does not make sense. This term is not shown in the drawings nor is it described in the detailed description. Figure 2 show elements s8 and s10 that say "there is template of corresponding size?" and "resize template to corresponding size." This claim term is interpreted as an attempt to claim steps s8 and s10 of figure 2 and the corresponding text in paragraphs 67-68. Therefore this claim is read as "the comparison comprises resizing the verification data to conform to the size of the cut images." If this is correct, the claim should be amended this way.

For claim 10, "the program" lacks antecedent basis.

For claim 14, "determining the distance information required at the time of execution of the limiting by the instructions" is unclear. Also, "the execution" lacks antecedent basis.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-11 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim does not state that the instructions are stored on the computer readable medium, nor that the instructions are executed by a computer.

The preamble of claim 10 should read "A computer-readable medium storing a computer program of instructions which, when executed by a computer processor, cause the computer processor to perform a method comprising...."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,638,136 issued to Kojima et al. ("Kojima").

Kojima discloses a method for detecting whether an image of a characteristic portion exists in an image to be processed, comprising: sequentially cutting images of a required size from the image to be processed (Y1, Y2 and Y3 of figure 113); and comparing the cut images with verification data corresponding to the image of the characteristic portion (face is compared with template in figure 113), wherein a limitation is imposed on a size range of the image of the characteristic portion with reference to the size of the image to be processed, based on information about a distance between a subject and a location of imaging the subject, obtained when the image to be processed has been photographed, thereby limiting the size of the cut images to be compared with the verification data (the size of the template and the face are determined based on the object distance and the focal length as shown in figure 109).

For claim 2, Kojima discloses that the limitation is effected through use of information about a focal length of a photographing lens in addition to the information about a distance to the subject (see figure 109).

For claim 6, Kojima discloses that the verification data comprises template image data pertaining to the image of the characteristic portion as shown in figure 113.

For claim 10, which has the elements of claim 1 expressed in computer readable medium form, this claim is rejected for the reasons given in claim 1.

For claim 14, Kojima determines the distance information required at the time of execution of the limiting by the instructions as shown in figure 109.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of U.S. Patent Number 6,292,575 issued to Bortolussi et al. ("Bortolussi").

Kojima discloses the elements of claim 1.

Bortolussi discloses the comparison is performed through use of a resized image into which the image to be processed has been resized as shown in figure 5.

It would have been obvious to one of ordinary skill in this art at the time of invention to modify the matching method of Kojima to include the step of resizing the image when performing the comparison because the multi-scale correlation technique is relatively fast to process as taught by Bortolussi at column 9 lines 33-50.

Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of U.S. Patent Number 6,580,810 issued to Yang et al. ("Yang"). figures 7a and 7b

For claim 9, Kojima discloses the elements of base claim 1.

Yang discloses limiting a range in which an image of a characteristic portion of a second image to be processed followed by a first image to be processed, is retrieved

Art Unit: 2624

through use of information about a position of a characteristic portion extracted from the first image as shown in figures 7a and 7b.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the matching method of Kojima to limit the size of the search window for the benefit of being more precise in matching as taught by Yang at col. 6 line 66 through col. 7 line 14.

Claim 11, which contains elements similar to claim 9, is rejected for the reasons given in the rejection of claim 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS

June 26, 2007



JINGGE WU  
SUPERVISORY PATENT EXAMINER